Birds find home in dredged sand

By JoAnne Castagna
New York District

Terns are an endangered bird species that migrate north during the spring and summer and nest on Long Island. Today, hundreds of terns are nesting on East Inlet Island in the Long Island Intracoastal Waterway.

This was the goal of a multi-agency team assembled by New York District in 2002 that created a wildlife habitat on the island for endangered birds using dredged sand from the waterway. Recently the initiative faced an obstacle that threatened the project, but the team put their minds together, and today the habitat is thriving.

The Long Island Intracoastal Waterway is a small part of the Gulf and Atlantic Intracoastal Waterway that stretches from the southern tip of Texas up the east coast to New York. The waterway allows vessels to travel along the coast without having to head into the rough seas.

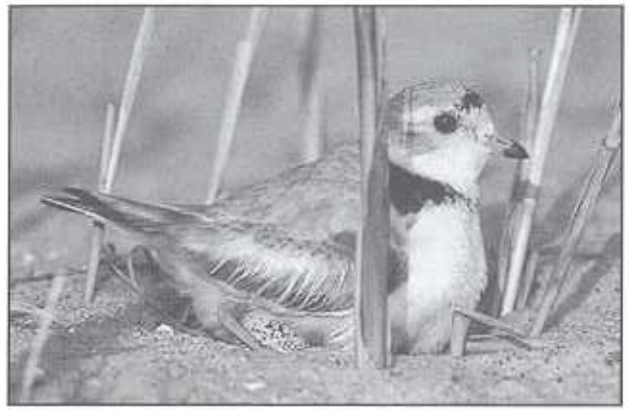
Along the New York coast, the waterway continues inland into a spur channel into Long Island's Great South Bay, Moriches Bay, and Shinnecock Bay. Within these bays is the Long Island Intracoastal Waterway.

The Long Island Intracoastal Waterway spans 33.6 miles from Patchogue to the south end of the Shinnecock Canal. To facilitate navigation in the channel, the U.S. Army Corps of Engineers' Long Island Intracoastal Waterway Dredging Project has dredged the channel every few years to clear out shoaling and sand build up.

The dredged sand has been placed on upland sites on the mainland and ocean barrier islands, but recently development along the shoreline has eliminated this as an option.

The Corps assembled a multi-agency team to think of disposal alternatives.

The team consists of New York District, U.S. Fish and Wildlife Service, Coast Guard, New York State Department of Environmental Conservation (Region 1), New York State Department of State, National Park Service (Fire Island National Seashore), and Brookhaven.



A piping plover nests in dredged sand at East Inlet Island. (Photo courtesy of New York District)

"Sediment samples taken before dredging indicated the material would be predominantly sand. Unfortunately, individual pockets of finer material can pop up. Of the 53,000 cubic yards of material dredged from the project, about 7,000 cubic yards was fine silty material. Though not contaminated, the finer grain materials would detract from the shore bird habitat restoration and preclude the regrowth of native beach grass and golden-rod vegetation."

Hintz said, "If encountered early in the project, contractors can generally cover the finer materials with sandy material. Unfortunately for East Inlet Island, the finer materials were encountered late in the project and had to be left exposed on the surface."

Immediate action

The team couldn't do anything since last spring because the region had a very wet season, and the ground needed to dry before work could be done. In early March the team saw a new nesting season on the horizon and the need for immediate action. A project delivery team was organized in New York District to develop suitable alternatives to remediate the situation. The plan was to cover most of the silty material with a layer of sand and, where the silt was deeper, dig trenches to allow the material to dry.

On March 3 the multi-agency team approved of the Corps' remediation plan. The plan needed to be executed and completed by April 1, before the return of the birds. On March 25 B + B Dredging, a small business contractor, got the contract and had one week to complete the remediation work, starting on March 25. The work was completed three days ahead of schedule, on March 28.

On April 7 after the remediation was completed, the Corps worked with the U.S. Fish and Wildlife Service and the New York State Department of Environmental Conservation to plant 1,500 plugs of beach grass and 300 goldenrod plants on the now sandy surface of the island.

Success

"As an agency, this has been a great experience for us," said Hintz. "We recognize the delicate relationship that needs to be built with the resource agencies early to not only define the specific areas that need to be dredged, but also a better understanding of the material to be removed.

"With the nature of dredging, these situations are unavoidable," Hintz added. "The most significant lesson learned is to work with the resources agencies up-front to develop remedies should a similar incident occur project. The goal is to create a win-win situation for everyone.

"This project is a success in that not only are the endangered birds species presently nesting on East Inlet Island, but this obstacle also showed the partnering agencies that if we put our minds together we can really accomplish amazing things in a short time," Hintz concluded.

Quail released at lake

Beneficial use

"After examining what other districts along the waterway were doing with their dredged sand, the team decided to dredge 'bite-size pieces' of the channel, and deposit these smaller portions of sand on an island to create a wildlife habitat for threatened and endangered bird species, including least terns, common terns, piping plovers and roseate terns," said John Tavolaro, Acting Chief of Operations Division in New York District.

East Inlet Island, a 30-acre island one-half mile off the Town of Moriches, was chosen. "In September 2002 the project began and from October 2002 to January 2003, a contractor dredged about five miles of the Moriches Bay and pumped the dredged sand onto a 13-acre portion of the island," said Jodi McDonald, Project Manager. The dredged sand was then re-graded to achieve the proper slope and texture preferred by nesting birds.

The habitat was designed to encourage the birds to nest on the island. The team made the island inviting by de-vegetating it and building nest boxes to replicate the habitat needs of these shorebirds. In addition, they placed string fencing and interpretive signage reminding the public that the area is restricted from human use. They also developed a predator control program, in case predators such as foxes and raccoons are identified on the site.

Problem

In the spring these birds colonize, nest, and breed on Long Island after spending the winter in the south. In spring 2003 birds were spotted nesting on the island, but the birds were primarily seagulls, not the terns that the habitat was primarily created for.

The reason was that the ground was not suitable for tern nesting. The ground was clay-like, not the sandy soil that is more suitable for terns to nest in. In addition, the ground was also not conducive to the vegetation preferred by terns.

"The appearance resembled the surface of the moon," said Randall Hintz, Chief of Technical Support Section.

Quail released at lake

Article by Claudia Hixson
Photo by Jim Hachigian
New England District

The staff at Buffumville Dam in New England District conducted an experiment in March to reintroduce the bobwhite quail into central Massachusetts.

To give the quail their best chance, a three-acre plot between a horse farm and an acorn stand was cleared and harrowed, and cover was established. Teepee-like shelters were built for their evening abodes. A callback system, a recording of a bobwhite quail announcing regroup, was installed that played at dawn and dusk to keep the birds connected in their unfamiliar surroundings.

The quail were purchased from a game farm in North Carolina, which shipped them north. The birds had to be kept in a makeshift pen for five days before release when the weather turned unexpectedly cold.

To acclimate the quail, they were exposed to lower and lower temperatures as the waiting time went by. To while away the hours, the quail fattened up on corn, millet, cabbages, and tomatoes. Finally, feed was liberally scattered at the site, then 50 pair of quail were released on March 22.

Historically, bobwhite quail have ranged from the southeast to Canada. They have not been seen in New England in recent times because of the decline in an agricultural economy. Except for Cape Cod, lower Connecticut, and Rhode Island, bobwhite quail are not finding the type of habitat cover and food necessary to sustain their numbers.

Quail typically lose up to 90 percent of their number each season to predation and the elements because they aren't smart, and they are extremely tasty to nearly everything.

Massachusetts Fish and Wildlife had reservations about the experiment. Their opinion was that the birds would not survive for a variety of reasons, but then conceded

Bobwhite quail are released at Buffumville Lake. (Photo courtesy of New England District)

that there was no harm in trying since quail are commonly released in nearby private clubs for commercial hunts.

Why attempt to bring bobwhite quail back to the "wilds" of Charlton, Mass.? First, quail never travel far in their lives, only about a mile to a mile-and-a-half, so they will probably not disperse beyond Buffumville Dam's boundaries. Second, anything that New England District does to manage for quail will enhance the habitat of existing ground birds, such as woodcock and grouse. Third, the bobwhite quail's distinctive call, a two-syllable whistle that sounds a little like "Bob-*white!* Bob-*white!*", is beautiful and will enrich the experience of the public who hike and enjoy recreation at Buffumville Lake.

If the experiment is successful, more quail will be released at Hodges Village Dam.